In the Specification

Amend the specification as follows:

Amend the paragraph beginning at page __1__ line __4__ as follows:

This invention relates to a manufacturing process requiring lithography and, in particular, to monitoring of lithographic process conditions used in manufacturing microelectronic components and providing improved focus control.

Amend the paragraph beginning at page __3__ line __3__ as follows:

Bearing in mind the problems and deficiencies of the prior art, it is therefore an object of the present invention to provide andan improved lithographic system for manufacturing microelectronic circuits.

Amend the paragraph beginning at page __5__ line __10__ as follows:

The determination of the desired focus setting of the energy beam may be used to correct energy beam focus during lithographic forming of the functional circuit elements. Preferably, the determination of the desired focus setting of the energy beam is based on both the sign and magnitude of a focus correction feedback, and the focus correction feedback is based on a negative offset target defocus and a positive offset target defocus.

Amend the paragraph beginning at page __6__ line __15__ as follows:

The energy beam may be projected through the target mask portion onto a plurality of substrate locations at a plurality of focus settings to create a plurality of targets, wherein

the widths of the individual target arrays are measured and compared to determine the desired focus of the energy beam. Preferably, the plurality of energy beam focus settings are distributed at predetermined positive and negative increments around an initial focus setting. The process may be used to form a plurality of focus setting targets on a semiconductor wafer for use in manufacture of microelectronic circuits, wherein at least one of the focus setting targets is lithographically formed simultaneously with, and at locations on the wafer away from, functional lithographic circuit elements on the wafer, such that the functional lithographic circuit elements may be separated from the focus setting targets when the wafer is cut apart. The determination of the desired focus setting of the energy beam may be based on both the sign and magnitude of a focus correction feedback, and the focus correction feedback may be based on a negative offset target defocus and a positive offset target defocus.

Amend the paragraph beginning at page __8__ line __28__ as follows:

A preferred target portion of a lithography mask using complementary dual-tone arrays for use in the present invention is shown in Fig. 1. Target 70 as disposed on a lithography mask (and later as printed on a semiconductor wafer substrate) comprises a pair of identical, but tone-contrasting arrays 71, 73. Array 71 comprises a plurality of equilength, ~~eqithickness~~equithickness parallel elements or lines (shapes) 75 which contrast with the substrate 18 (on a mask) or 32 (on the wafer). Array 73 comprises a plurality of equilength, equithickness parallel elements or spaces 77 on a contrasting background 60, which itself contrasts with substrate 18, 32. The target arrays 71, 73 comprise

complementary dual tone patterns, which will be explained in more detail below. The free edges of the elements of array 71 and of array 73 are aligned along straight lines. The individual elements need not be spaced by a distance equal to the element thickness. The pitch P of the array elements is the thickness of each element plus the spacing between each element and is of a size such that the individual array elements are not necessarily resolved when viewed through the metrology tool. The pitches of the two arrays 71, 73 are equal and the thickness of the line (shape) elements of 71 is equal to the spacing of the space elements of 73. The width of arrays 71, 73 is given by the measurable dimensions L and S, respectively. The dimensions of the elements 75, 77 in arrays 71, 73, respectively, are identical, and the elements 75, 77 are parallel and spaced apart from each other in the horizontal dimension as shown.